

REMARKS

Claims 2 and 3.

Claims 2 and 3 were rejected under 35 U.S.C. 103 as unpatentable over Wolf et al., Benton and Hsiung et al. as applied to claim 1, and further in view of Eddowes.

As the Examiner has correctly noted, Eddowes does teach the use of a titrating electrode with either an ISFET or an ENFET. However, neither teaches the use of a *plurality* of electrodes spaced *remotely* from the FET for electrochemical determination of tow or more parameters of a solution. The combination of Wolf et al., Benton or Hsiung et al. does not remedy this deficiency, even if there were a basis for combining them, which there is not.

Claim 4.

Claim 4 was rejected under 35 U.S.C. 103 as unpatentable over Wolf et al., Benton and Hsiung et al. as applied to claim 1, and further in view of Garshol et al. As previously noted, the electrodes 19 of Wolf are described as simply being "stimulating electrodes" (col. 8, l. 46-47) whose function is to induce the biological receptor cells 7 to release a substance to be detected. They are not taught to be remotely spaced from the FET and connectable in circuit with a conductive surface surrounding the gate of an ISFET for electrochemical determination of tow or more parameters of a solution. The combination of Wolf et al., Benton, Hsiung et al. and Garshol et al does not remedy this deficiency. Nor is there any teaching or suggestion of forming the remotely spaced electrodes of larger and smaller electrodes.

Claims 5 and 9-11.

Claims 5 and 9-11 were rejected under 35 U.S.C. 103 as unpatentable over Wolf et al., Benton and Hsiung et al. as applied to claim 1, and further in view of Matsumoto.

Claim 5 recites that the remotely spaced electrodes of claim 1 perform oxidation/reduction measurements with respect to an external reference electrode. The sensors

of Wolf referred to at col. 8, l. 53-68 and col. 9, l. 14-16 do not perform this function, nor do the sensors 7, 8 and 9 of Matsumoto which are described as “a working electrode 7 and a counter electrode 8 and a reference electrode 9.” It should also be noted that these electrodes are adjacent each other, and none surround the FET s called for in applicant’s claim 1 from which claim 5 depends.

Similarly, in light of the lack of teaching in the basic reference (Wolf) of the remotely spaced electrodes of claim 1, there would be no reason to use the current drive of Matsumoto to the structure of Claim 9 and it cannot be obvious over the cited references.

Finally, claims 10 and 11 specify that the external *source* of current increases linearly during its application over at least some range. This is the *drive* current applied to the electrodes. In contrast, Matsumoto, at col. 33, l. 39-46, is speaking of the *response* current, not the *drive* current, an entirely different situation.

In sum, the cited references neither teach, nor suggest, whether singly or in combination, the claimed inventions.

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Respectfully submitted,

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